

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO). I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,039	72,039 02/05/2002		Oliver Schreck	P02,0018	3794
26574	7590	05/19/2006		EXAMINER	
SCHIFF I	HARDIN,	LLP	ROY, BAISAKHI		
	DEPARTM RS TOWEI		ART UNIT	PAPER NUMBER	
CHICAGO, IL 60606-6473				3737	
				DATE MAILED: 05/19/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Assistant Community	10/072,039	SCHRECK, OLIVER	
Office Action Summary	Examiner	Art Unit	
	Baisakhi Roy	3737	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	Lely filed the mailing date of this communication. D (35 U.S.C. § 133).	
Status			
 1) ⊠ Responsive to communication(s) filed on 21 Fe 2a) ☐ This action is FINAL. 2b) ☒ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E 	action is non-final. nce except for formal matters, pro		
Disposition of Claims			
4) ☐ Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-15 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ access	vn from consideration. r election requirement.	Examiner.	
Applicant may not request that any objection to the case Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Ex	drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119		·	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:		

Art Unit: 3737

11

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, with respect to the rejection(s) of claim(s) 1-15 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by deCharms (2002/0103428). deCharms discloses a method and apparatus for functional MRI including obtaining and storing a plurality of images with and without stimulation together with information indicating whether the image was registered with or without stimulation where the subject is at rest or under stimulation ([0075] [0149]) and with at least one image related stimulation value such as the type of stimulation and information describing a point in time of said stimulation ([0015] [0106] [0108] [0112] [0180]). deCharms further teaches determining an "image-related correlation values" or

Art Unit: 3737

. . .

images wherein points of highest intensity correspond to points of highest correlation or coincidence to better differentiate between activated and non-activated brain regions ([0075] [0099-0100] [0144]. deCharms teaches storing the imaging parameters different from the image data are with the image data ([0106] [0108] [0112] [0180 lines 25-35]). deCharms also teaches the use of an optical stimulation, acoustic stimulus or pressure stimulus ([0148]).

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jesmanowicz et al. in view of deCharms (2002/0103428). Regarding claims 1, 2, 4-6, 7, 14, and 15, Jesmanowicz et al. disclose a method and apparatus for functional MRI including obtaining and storing a plurality of images with and without stimulation together with information indicating whether the image was registered with or without stimulation and with at least one image related stimulation value such as the type of stimulation and information describing a point in time of said stimulation (col. 2 lines 41-67, col. 10 lines 45-60). Jesmanowicz et al. further teach determining an "image-related correlation values" or images wherein points of highest intensity correspond to points of highest correlation or coincidence to better differentiate between activated and non-activated brain regions (col. 3 lines 6-18, col. 6 lines 23-38 and claim 1). The reference

Application/Control Number: 10/072,039 Page 4

Art Unit: 3737

further teaches filtering out some images that should be ignored during the evaluation (col. 3 lines 51-66). In reference to the storage of each image with information independent of the picture elements or the storage of parameters with the image,

Jesmanowicz et al. do not explicitly teach storing of image data with information different from the image and a pressure and acoustic stimulus. In the same field of endeavor, deCharms discloses a MR method where imaging parameters different from the image data are stored with the image data ([0106] [0108] [0112] [0180 lines 25-35]). deCharms also teaches the use of an acoustic stimulus or pressure stimulus ([0148]). It would have therefore been obvious to one of ordinary skill in the art to use the teaching by deCharms to modify the teaching by Jesmanowicz et al. for the purpose of providing all relevant information together with the image data and therefore enabling a repeated evaluation at a later point in time.

Regarding claims 3, 9, 12, and 13, Jesmanowicz et al. further teach triggering a neural activity by a stimulus or sensory stimulator which could be in the form of optical stimulation and a stimulation source to measure the pulse intensity of an electrical pulse (col. 10 lines 45-60).

Regarding claim 8, Jesmanowicz et al. teach obtaining information describing the intensity level of the applied stimulus (col. 2 lines 57-60).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baisakhi Roy whose telephone number is 571-272-7139. The examiner can normally be reached on M-F (7:30 a.m. - 4p.m.).

Application/Control Number: 10/072,039

Art Unit: 3737

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BR

BR

BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

Page 5